United States Environmental Protection Agency EPA New England One Congress Street, Suite 1100 Boston, MA 02114-2023

November 16, 2004

To: J. Kilborn, EPA

H. Inglis, EPA

R. Howell, EPA (w/o attachments)

D. Moore, USACE

K.C. Mitkevicius, USACE

S. Steenstrup, MA DEP (2 copies)

R. Bell, Esquire, MA DEP

S. Peterson, CT DEP

A. Silfer, GE

J. Novotny, GE

J.R. Bieke, Esquire, Shea & Gardner

S. Messur, BBL

D. Young, MA EOEA

K. Munney, US Fish and Wildlife

R. Cataldo, ENSR

R. Nasman, The Berkshire Gas Company

Mayor Ruberto, City of Pittsfield

Commissioner of Public Works and Utilities, City of Pittsfield

Public Information Repositories

RE: October 2004 Monthly Report

1.5 Mile Reach Removal Action

GE-Pittsfield/Housatonic River Site

Enclosed please find the October 2004 Monthly Report for the 1.5 Mile Reach Removal Action. In accordance with the Consent Decree for the GE-Pittsfield/Housatonic River Site, the United States Environmental Protection Agency (EPA) is performing the 1.5 Mile Reach Removal Action, with General Electric funding a portion of the project through a cost sharing formula.

The EPA has entered into an agreement with the United States Army Corps of Engineers (USACE) to assist in the design and construction of the Removal Action. The USACE subsequently awarded a design-construct contract to Weston Solutions, Inc. (Weston). Weston, with several subcontractors, will be performing the design and construction activities for the 1.5 Mile Reach Removal Action.

If you have any questions, please contact me at (413) 236-0969. Sincerely,

Dean Tagliaferro

1.5 Mile Reach Removal Action Project Manager

1. Overview

During October 2004, the Environmental Protection Agency (EPA), the United States Army Corps of Engineers (USACE), the USACE's contractor, Weston Solutions, Inc., and Weston's subcontractors continued remediation activities on the 1.5 Mile Reach Removal Action. The primary work included completing excavation, riverbed power washing, and backfill activities in Cells 20, 21 and 22. In addition, transfer of non-TSCA and TSCA materials from the stockpile management areas to the GE On Plant Consolidation Areas (OPCAs) was performed. Also, transfer of non-TSCA materials and NAPL-impacted materials from the stockpile management areas to approved off-site facilities continued.

2. Chronological description of tasks performed

Refer to Figure 1 for an orientation of the excavation cells and their respective locations.

By the end of September 2004, Cell 20, 21 and 22 excavation preparation activities were completed, a temporary access ramp was built over the 54-inch pipes at the location of the load out area on Parcel I7-21-3 to allow access to the east side of the river channel. The survey contractor initiated the delineation of non-TSCA and TSCA excavation areas in Cells 20, 21 and 22. The dewatering activities in Cells 20, 21 and 22 were also initiated.

During the first week of October, the dewatering of Cells 20, 21 and 22 continued, minor repairs to the temporary earthen dam at the 54-inch pipe outfall were completed. Once the dewatering was completed, riverbank excavation activities were initiated in Cells 20E, 21E and 22E. The excavated material was placed into an off-road articulated dump truck (ADT), which transported and dumped the material into a roll-off box located in the river channel in Cell 20. The material was then loaded into dump trucks by a long stick excavator located on the load out area on Parcel I7-21-3. The excavated TSCA material was transported to Area 64A stockpile management area. Due to a large quantity of excavated TSCA material, in addition to Area 64A storing TSCA material, Area 64B was designated to stockpile TSCA material as well. The non-TSCA riverbank material pre-characterized for off-site disposal was transported to Area 64D stockpile management area. (See Table 1 for quantities of material generated in the month of October 2004 and Table 2 for quantities of material generated to date.)

Surveying activities continued in Cells 20E, 21E and 22E. The surveyors monitored the excavation activities in Cells 20E, 21E and 22E to ensure appropriate design excavation depths were achieved.

Also, during the first week of October, the construction of a temporary upstream dam in Cell 19, adjacent to the Deming Street load-out area was completed. The dam was built to control the water from the Elm Street Bridge storm water outfall during the storm events. The dam was constructed by using geotextile, filter stone and 18-inch riprap.

In addition, by the end of September, the activities associated with the fall planting in Cells 16, 17, 18E and 19E were initiated. The locations of shrubs and trees were staked out for future planting. During the first week of October, the planting activities continued. The planting layout was completed in Cells 16, 17, 18E and 19E and the actual tree and shrub planting begun. Also, the invasive plant spaying was completed in Phase 1, Transition Phase and the first 600 feet of Phase 2.

During the second week of October, the excavation activities in Cells 20E, 21E and 22E continued. The riverbank and riverbed excavation activities were completed. The excavated material was placed into an ADT, which transported and dumped the material into a roll-off box located in the river channel in Cell 20. The material was then loaded into dump trucks by a long stick excavator located on the load out area on Parcel I7-21-3. The excavated TSCA material was transported to Area 64A, Area 64B and Building 63 stockpile management areas. The non-TSCA riverbank material pre-characterized for off-site disposal was transported to Area 64C and Building 65 stockpile management areas.

Bedrock was encountered in approximately 60% of the riverbed in Cells 20E, 21E and 22E. In addition to the standard excavation equipment, a small track excavator was used to access and remove the sediment from the areas of the river bottom where crevasses and depressions in the weathered bedrock were numerous. The high pressure power washing of bedrock to remove any loose sediment was initiated in Cells 20E, 21E and 22E. High pressure power washing of bedrock was supplemented with a vacuum truck to remove any residual sediment from the bedrock. All water generated during the power washing was diverted to the water treatment system. All the residual sediment material was collected into roll-off boxes located in the riverbed and subsequently transferred to the water treatment system modutank.

In an approximately 200 foot stretch of the riverbed across Cells 20E, 21E and 22E, a three-foot layer of sediment was excavated, but bedrock was not reached. However, a dense till material was encountered. EPA directed that four post-excavation confirmation samples be collected from the dense till material and analyzed for PCBs. The PCB results were all less than the 1 ppm clean up goal for sediment. Therefore, the excavation in the 200 foot stretch of riverbed was terminated.

Also, during the excavation of the riverbed sediment in Cell 20E, around the former dam foundation, located adjacent to Parcel I7-20-2 NAPL was encountered. The excavation of the NAPL-impacted area extended approximately to 4.5 feet in depth. The Cell 20E NAPL-impacted material was excavated and transported to the Building 68 stockpile management area. In some areas in Cell 20E, the NAPL material overlapped into the TSCA areas. This material was excavated and transported to the Building 68 stockpile management area into a separate pile from the non-TSCA NAPL. Bedrock was encountered in the entire river bottom in Cell 20E where NAPL was present. In addition to the standard excavation equipment, a small track excavator was used to access and remove the NAPL and the sediment from the areas of the river bottom where crevasses and depressions in the weathered bedrock were numerous. The high pressure power washing of bedrock to remove any NAPL staining and loose sediment was necessary in Cell 20E. High pressure power washing of bedrock was supplemented with a vacuum truck to remove any residual NAPL and sediment from the bedrock. All of the water

and the free flowing NAPL from the excavation areas were diverted to the water treatment system. It was observed that the depression where the NAPL was found had several bedrock fractures; therefore, there was the potential for NAPL to seep out into the restored riverbed in the future. The depression was encapsulated with a grout cement mixture. Filter stone and 18-inch riprap was then placed into the NAPL hole to bring it up to grade. This concluded the excavation activities in Cells 20E, 21E and 22E.

The surveyors monitored the excavation activities in Cells 20E, 21E and 22E to ensure appropriate design excavation depths were achieved. The final excavation verification survey was completed in Cells 20E, 21E and 22E. Also staking out of the backfill grades was initiated in Cells 20E, 21E and 22E.

Other activities during the second week of October included the continuation of the fall tree and shrub planting activities in Cells 16, 17, 18E and 19E. The temporary fencing was removed between Parcels I8-23-6 and I8-23-4. This completed the restoration activities on Parcel I8-23-4.

Also, Phase 3A site preparation activities were initiated. The clearing of trees and brush on Parcels I7-2-44, I7-2-35 and I7-2-36 was initiated.

During the third week of October, backfill activities in Cells 20E, 21E and 22E were initiated. First a layer of geotextile was installed along the centerline of the riverbed in Cells 20E, 21E and 22E to delineate the interface between the east side of the riverbed which has been excavated and the contaminated sediments on the west side of the riverbed which has not been excavated. Due to the presence of bedrock within the 60% of riverbed of Cells 20E, 21E and 22E, excavation depths varied. Therefore, various backfill configurations were developed to meet the design requirements. Twelve-inch riprap was placed in low lying areas and depressions in the bedrock to bring the excavated surface up to grade. Areas of the riverbed where the excavation depth was 3 feet or greater were backfilled with a layer of common fill, filter material, and 12-inch riprap. Areas of the riverbed where bedrock was encountered at very shallow depths were either backfilled with filter material or were left with the bedrock exposed.

The lower riverbank in Cells 20E, 21E and 22E was backfilled with a six-inch layer of common fill, a six-inch layer of filter material and a twenty four-inch layer of 18-inch riprap up to the 1.5 year flood elevation, which ranges between 969.0 feet to 969.5 feet. The riverbank backfilling activities above those elevations were initiated. Common fill was installed in twelve inch horizontal lifts and compacted to meet the 95% compaction requirement. Then, a minimum six-inch layer of topsoil, herbaceous seed mix and erosion control blankets were installed. Silt fencing was installed along the top of the riverbanks in Cells 20E, 21E and 22E as an erosion control measure. The surveyors monitored the backfilling activities in Cells 20E, 21E and 22E to ensure appropriate design backfill grades were achieved.

Once the riverbed and the lower riverbank backfilling activities in Cells 20E, 21E and 22E were completed, activities associated with 54-inch HDPE pipe relocation were initiated. The temporary access ramp over the 54-inch pipe located on Parcel I7-21-3 was removed. All construction equipment and supplies were removed from the riverbed. The two 54-inch HDPE

pipes were then relocated from the west side to the east side of the river channel. Once the relocation was completed the pipes were then reconnected to the pipe restraint system.

Other activities during the third week of October included the continuation of the fall tree and shrub planting activities in Cells 16, 17, 18E and 19E. Also, work associated with two 18-inch riprap swales on the riverbanks on Cell 18E was completed. The drainage riprap swales were installed to prevent erosion caused by storm water runoff from High Street. Also, topsoil herbaceous seed mix and erosion control blankets were placed in the cellular geoweb on the Cell 19E riverbank.

Phase 3A site preparation activities continued. The clearing of trees and brush on Parcels I7-2-44, I7-2-35 and I7-2-36 continued. The survey contractor continued topography surveys in Phase 3A.

In addition, miscellaneous fencing and fence repair activities were performed during the third week of October. The security fence was relocated to the property boundary line on Parcel I8-4-6. Repairs and adjustments were made to the fence on Parcel I8-10-4. Repairs were made to the security fencing along Caledonia Street.

During the fourth week of October, the survey contractor continued the delineation of non-TSCA and TSCA excavation areas in Cells 20W, 21W and 22W. The access ramp into the riverbed from Parcel I7-21-3 riverbank was re-built. The dewatering activities continued in Cells 20, 21 and 22. Once the dewatering was completed, riverbank and riverbed excavation activities in Cells 20W, 21W and 22W were initiated. The excavated material was placed into an ADT, which transported and dumped the material into a roll-off box located in the river channel in Cell 20. The material was then loaded into dump trucks by a long stick excavator located on the load out area on Parcel I7-21-3. The excavated TSCA material was transported to Area 64A and Building 63 stockpile management areas. The non-TSCA riverbank material pre-characterized for off-site disposal was transported to Area 64B and Building 65 stockpile management areas.

Bedrock was encountered in the entire Cell 20W and approximately 60% of the riverbed in Cells 21W and 22W. In addition to the standard excavation equipment, a small track excavator was used to access and remove the sediment from the areas of the river bottom where crevasses and depressions in the weathered bedrock were numerous. The high pressure power washing of bedrock to remove any loose sediment was initiated in Cells 20W, 21W and 22W. High pressure power washing of bedrock was supplemented with a vacuum truck to remove any residual sediment from the bedrock. All water generated during the power washing was diverted to the water treatment system. All the residual sediment material was collected into roll-off boxes located in the riverbed and subsequently transferred to the water treatment system modutank.

In an approximately 200 foot stretch of the riverbed across Cells 21W and 22W a three-foot layer of sediment was excavated, but bedrock was not reached. However, a dense till material was encountered. EPA directed that four post-excavation confirmation samples be collected from the dense till material and analyzed for PCBs. The PCB results were all less than the 1 ppm clean up goal for sediments. Therefore, the excavation in the 200 foot stretch of riverbed was terminated.

Also, during the excavation of the riverbed sediment in Cell 20W, around the former dam foundation, located adjacent to Parcel I7-21-5 NAPL was encountered. The excavation of the NAPL-impacted area extended approximately to 4 feet in depth. The Cell 20W NAPL-impacted material was excavated and transported to the Building 68 stockpile management area. Bedrock was encountered in the entire river bottom in Cell 20W where NAPL was present. In addition to the standard excavation equipment, a small track excavator was used to access and remove the NAPL and the sediment from the areas of the river bottom where crevasses and depressions in the weathered bedrock were numerous. The high pressure power washing of bedrock to remove any NAPL staining and loose sediment was necessary in Cell 20W. High pressure power washing of bedrock was supplemented with a vacuum truck to remove any residual NAPL and sediment from the bedrock. All of the water and the free flowing NAPL from the excavation areas were diverted to the water treatment system. It was observed that the depression where the NAPL was found had several bedrock fractures; therefore, there was the potential for NAPL to seep out into the restored riverbed in the future. The depression was encapsulated with a grout cement mixture. Filter stone and 18-inch riprap was then placed into the NAPL hole to bring it up to grade.

Once the excavation activities were completed in Cells 20W, 21W and 22W the temporary access ramp located on the riverbank of Cell 20W (Parcel I8-21-3) was removed. The removed access ramp material was transported to Area 64E for building future ramps.

Surveying activities continued in Cells 20W, 21W and 22W. The surveyors monitored the excavation activities in Cells 20W, 21W and 22W to ensure appropriate design excavation depths were achieved. The final excavation verification survey was initiated in Cells 20W, 21W and 22W where the excavation was completed.

Also during the fourth week of October the fall tree and shrub planting activities in Cells 16, 17, 18E and 19E were completed. In addition the installation of three white pine trees on Parcel I8-4-6 was completed and maintenance work was performed on the arborvitaes on Parcel I8-23-6.

Also, work associated with building a drainage swale on Cell 22E riverbanks was completed. Approximately one load (10cy) of non-TSCA riverbank material was generated during the installation of the swale. The material was transported to Area 64B stockpile management area. The drainage riprap swale was installed to prevent erosion caused by storm water runoff from Caledonia Street.

During the last week of October, the excavation activities were completed on the riverbank of Cell 20W (area where the temporary access ramp was located). This concluded excavation activities in Cells 20W, 21W and 22W. The survey contractor completed the final excavation verification survey in Cells 20W, 21W and 22W and initiated the installation of the backfill grade stakes.

A new temporary access ramp was built on the Riverbank of Cell 20W (Parcel I7-21-3). The ramp will be used during the backfill activities in Cells 20W, 21W and 22W. Once the construction of the access ramp was completed, riverbed and riverbank backfill activities were initiated in Cells 20W, 21W and 22W.

Due to the presence of bedrock within the entire Cell 20W and 60% of riverbed of Cells 21W and 22W, excavation depths varied. Therefore, various backfill configurations were developed to meet the design requirements. Twelve-inch riprap was placed in low lying areas and depressions in the bedrock to bring the excavated surface up to grade. Areas of the riverbed where the excavation depth was 3 feet or greater were backfilled with a layer of common fill, filter material, and 12-inch riprap. Areas of the riverbed where the excavation depth was less than 3 feet were backfilled with a layer of filter material and 12-inch riprap. Areas of the riverbed where bedrock was encountered at very shallow depths were either backfilled with filter material or were left with the bedrock exposed.

The lower riverbank in Cells 20W, 21W and 22W was backfilled with a six-inch layer of common fill, a six-inch layer of filter material and a twenty four-inch layer of 18-inch riprap up to the 1.5 year flood elevation, which ranges between 969.0 feet to 969.5 feet. The riverbank backfilling activities above those elevations were initiated. Common fill was installed in twelve inch horizontal lifts and compacted to meet the 95% compaction requirement. Then, a minimum six-inch layer of topsoil, herbaceous seed mix and erosion control blankets were installed.

The installation of the cellular geocell on the Cell 20W riverbanks was also completed. A significant portion of Cell 20W riverbank with slopes steeper than 2H:1V required cellular geoweb for riverbank stability purposes. The placement of topsoil, herbaceous seed mix and erosion control blankets in Cell 20W geoweb was completed.

Silt fencing was installed along the top of the riverbanks in Cells 20W, 21W and 22W as an erosion control measure. This concluded backfilling activities in Cells 20W, 21W and 22W.

The surveyors monitored the backfilling activities in Cells 20W, 21W and 22W to ensure appropriate design backfill grades were achieved. Once the backfill activities were completed the final restoration survey was initiated.

Other activities during the last week of October included maintenance work on the river diversion system, this included the installation of a bubbling system on the upstream end of the temporary river diversion dam to prevent freezing around the dam. Also, a water circulatory system was installed over the modutanks to prevent the water in the tanks from freezing.

Phase 3A site preparation activities continued. The survey contractor continued topography surveys in Phase 3A and staking of the limit of work lines. The clearing of trees and brush on the west riverbank along future Cells 23 and 24 continued. The installation of the security fencing along the riverbanks in Phase 3A was initiated.

During the month of October, the water treatment system treated water from Cells 19, 20, 21 and 22. Sampling of the water treatment system for parameters included in the NPDES exclusion permit was performed on October 21, 2004. An additional two samples were collected from the water treatment system, one sample between the modutank and the oil/water separator and the other between the sand and carbon filter. Also, due to the presence of NAPL in Cell 20, the analytical parameters for the water treatment system sampling were expanded to include volatiles and semi-volatiles. Air monitoring for particulate matter (PM10 sampling) and surface water turbidity monitoring were performed on a daily basis during the month of October. Surface

water sampling for total suspended solids (TSS) and PCBs was performed on October 06, 2004 and October 19, 2004. The monthly PCB air-monitoring event was performed on October 06, 2004. Sampling of topsoil for chemical parameters was performed on October 22, 2004 and sampling of common fill was performed on October 25, 2004. On October 14, 2004 and October 26, 2004 eight eight-point composite off-site disposal characterization samples were collected from the riverbed and riverbank materials excavated from Cells 20, 21 and 22 (stockpiled in Area 64B, Area 64C and Building 65). Two eight-point composite off-site disposal characterization samples were collected from NAPL-impacted material from Cell 20 (currently stockpiled in Building 68) on October 26, 2004. Eight post-excavation PCB confirmation samples were collected in the riverbed of Cells 20, 21 and 22 on October 04, 2004, October 06, 2004 and October 21, 2004.

In-situ disposal characterization sampling of riverbanks from the Phase 3A was completed. Five eight-point composite samples were collected for future off-site disposal. All samples were analyzed for PCBs, and two samples were analyzed for paint filter and Appendix IX metals. The in-situ data revealed one area on the riverbanks which yielded higher total PCB results than expected based on historical data. The area was re-evaluated and additional PCB sampling was completed. Three additional samples were collected (one 5-point composite, one 2-point composite and one discrete sample) for PCB analysis only.

Geotechnical samples were collected for common fill and topsoil material. The results of the geotechnical testing are not included in the monthly report but are contained in other submittals and are available upon request.

The transfer of cobble materials from the Area 64E and non-TSCA riverbank soil from Area 64D stockpile management areas to the Hill 78 OPCA was performed on October 01, 2004. The transfer of TSCA materials from Area 64A, Area 64B and Building 63 stockpile management areas to the Building 71 OPCA was performed from October 11, 2004 to October 14, 2004. (See Table 3 for a summary of material transported to the OPCAs during the month of October 2004 and Table 4 for a summary of material transported to the OPCAs for the project through October 2004.)

Also, Cells 18W and 19W non-TSCA materials from the Building 65 and Cells 20, 21 and 22 non-TSCA material from the Area 64D, Area 64C and Building 65 stockpile management areas were transported to the Waste Management of New Hampshire-TREE, Rochester, NH from October 15, 2004 to October 29, 2004. (See Table 5 for a summary of material transported to the Waste Management of New Hampshire-TREE, Rochester, NH during the month of October 2004.)

In addition, the water treatment system modutank NAPL-impacted materials were transported from Building 68 stockpile management area to CWM Chemical Services, Model City, N.Y. on October 04, 2004. (See Table 6 for a summary of material transported to the CWM Chemical Services, Model City, N.Y. during the month of October 2004).

Conditions and settlement monitoring activities on selected structures in Phase 3A were continued.

Stockpile management area activities continued throughout the month of October. Daily inspections, operation, and maintenance activities were performed within Buildings 63, 65, Area 64 (the outside stockpile area) and Building 68. Dust control procedures continued for access roads, parking areas, and material storage areas. Also, re-paving of the Lyman Street parking lot staging area was completed.

Traffic control was conducted on Lyman Street, High Street, Deming Street and Elm Street during the month of October.

3. Sampling/test results received

Table 7 contains a summary of the samples collected for the water treatment system sampling program on September 30, 2004 and October 21, 2004, however the PCB and the non-PCB results for the samples collected on October 21, 2004 are not yet available. Table 7a contains the non-PCB water treatment system sample results collected on September 30, 2004. The results of the daily particulate air monitoring program are summarized in Table 8. Table 9 is a summary of daily turbidity monitoring results. Results for PCB and TSS samples and water column monitoring data collected on October 06, 2004 and October 19, 2004 are presented in Table 10. Analytical results for the PCB air sampling conducted on October 06, 2004 are provided in Table 11. Table 12 contains data associated with common fill samples collected on October 25, 2004; the results for the topsoil samples collected on October 22, 2004 are not yet available. Postexcavation off-site disposal characterization sample results for the riverbed and riverbank materials excavated from Cells 20, 21 and 22 (stockpiled in Area 64B, Area 64C and Building 65) collected on October 14, 2004 and October 26, 2004 are summarized in Table 13. Postexcavation sediment sample results associated with the excavation confirmation of Cells 20, 21 and 22 collected on October 04, 2004, October 06, 2004 and October 21, 2004 are provided in Table 14. Table 15 presents non- PCB data associated with the Parcel I7-21-3 sluiceway sediment samples collected on September 29, 2004 and September 30, 2004. The data associated with the Phase 3A riverbank in-situ disposal characterization sampling is summarized in Tables 16 and 16a.

4. Diagrams associated with the tasks performed

Figure 1 is a map of Phase 1, the Transition Phase, Phase 2 and Phase 3A and includes the layout of all excavation cells, temporary dam, water monitoring locations, air sampling locations, access road locations, excavation load out locations, staging area locations, fence line location, the water treatment system pad location, and the utility trench location.

5. Reports received and prepared

Vibration monitoring activities were not performed during the month of October.

6. Photo documentation of activities performed

See attached photos.

7. Brief description of work to be performed in November 2004

- Relocate and extend the 54-inch river diversion pipe to approximately 450 feet beyond the Dawes Ave Bridge.
- Complete excavation activities in Cells 23E and 24E.
- Complete backfill activities in Cells 23E and 24E.
- Complete excavation activities in Cells 23W and 24W.
- Initiate backfill activities in Cells 23W, and 24W.
- Continue conditions and settlement monitoring activities on selected structures for Phase 3A.
- Continue stockpile management activities at Buildings 63, 65, 68 and Area 64 (outside contaminated material stockpile area).
- Continue transfer the non-TSCA materials from the stockpile management areas to approved off-site facilities.
- Continue to transfer TSCA and non-TSCA cobble material to the OPCAs.
- Continue daily air and turbidity monitoring.
- Continue PCB air sampling (once a month), water column sampling (twice a month), water treatment system sampling (once a month) and backfill material sampling (as needed).

8. Attachments to this report

- Table 1. Quantity of Bank and Sediment Material Excavated during the Month of October
- Table 2. Quantity of Bank and Sediment Material Excavated to Date
- Table 3. Quantity of Material Transferred to OPCAs during the Month of October
- Table 4. Quantity of Material Transferred to OPCAs to Date
- Table 5. Quantity of non-TSCA Material Transferred to Waste Management of New Hampshire TREE in Rochester, NH during the Month of October
- Table 6. Quantity of NAPL-Impacted Material Transferred to CWM Chemical Services, Model City, NY during the Month of October
- Table 7. NPDES PCB Sampling Results for Water Treatment System
- Table 7a. NPDES non-PCB Sampling Results for Water Treatment System
- Table 8. Daily Air Monitoring Results
- Table 9. Daily Water Column Turbidity Monitoring Results
- Table 10. Summary of Turbidity, PCB, and TSS Water Column Monitoring Results
- Table 11. PCB Air Sampling Results
- Table 12. Backfill Material Testing Results
- Table 13. Post-Excavation Soil/Sediment Stockpile Characterization Analytical Results
- Table 14. Cell 20, 21 and 22 Post-Excavation Confirmation Analytical Results
- Table 15. Sluiceway Sediment Characterization (Parcel I7-21-3) Analytical Results
- Table 16. In-situ Riverbank Characterization Sampling Analytical Results
- Table 16a. Additional In-situ Riverbank Characterization Sampling Analytical Results
- Figure 1- 1.5 Mile Removal Action Site Map
- Photodocumentation

Table 1 - Quantity of Bank and Sediment Material Generated During the Month of October October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are reported in cubic yards)

		Approximate Quantity of Excavated Bank an Sediment Material		
Date	Location	non-TSCA	TSCA	NAPL impacted
Bank Soil and Se	diment	•		
10/1/2004	Cell 20E and 21E	0	320	0
10/2/2004	Cell 21E and 22E	220	210	0
10/4/2004	Cell 22E	70	490	0
10/5/2004	Cell 20E and 22E	340	150	50
10/6/2004	Cell 20E, 21E and 22E	200	110	0
10/7/2004	Cell 20E, 21E and 22E	260	100	30
10/8/2004	Cell 20E	20	0	20
10/9/2004	Cell 20E	40	0	0
10/18/2004	Cell 20W, 22E and 22W	30	230	0
10/19/2004	Cell 20W and 22W	240	40	0
10/20/2004	Cell 20W, 21W and 22W	210	210	0
10/21/2004	Cell 20W, 21W and 22W	290	290	0
10/22/2004	Cell 20W, 21W and 22W	340	20	50
10/23/2004	Cell 20W and 21W	130	0	0
10/25/2004	Cell 20W	10	0	0
	Monthly total from bank soil and sediment	2,400	2,170	150

Note:

All quantities are in compacted or "in-place" cubic yards. All loads are estimated at 10cy per truck.

Table 2 - Quantity of Bank and Sediment Material Excavated to Date October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are reported in cubic yards)

		Approximate Quantity of Bank and Sediment Material Excavated to Date				
Date	Location	non-TSCA TSCA NAPL impacted Total				
09/26/02 to 10/02/02	Cell 1A	101	0	53	154	
10/02/02 to 10/04/02	Cell 1B	60	0	110	170	
10/18/02 to 10/29/02	Cell 2	874	175	0	1,049	
11/11/02 to 11/15/02	Cell 3	183	0	200	383	
11/18/02 to 11/25/02	Cell 4	2,283	198	0	2,481	
12/03/02 to 12/10/02	Cell 5	1,629	369	0	1,998	
01/07/03 to 01/15/03	Cell 6	832	658	0	1,490	
01/10/03 to 01/29/03	Cell 6A	2,611	68	0	2,679	
02/03/03 to 02/10/03	Cell 7&7A	1,114	636	0	1,750	
02/20/03 to 02/24/03	Cell 5A	899	0	0	899	
02/25/03 to 03/07/03	Cell 8&8A	1,245	90	0	1,335	
03/14/03 to 03/18/03	Cell 9	603	307	0	910	
03/27/03 to 04/07/03	Cell 10&10A	1,730	133	0	1,863	
04/14/03 to 04/16/03	Cell 12	668	1,354	0	2,022	
04/30/03 to 05/09/03	Cell 11	1,713	341	10	2,064	
05/27/03 to 06/12/03	Cell 11A	957	166	462	1,585	
06/25/03 to 07/29/03	Cell 12A	1,656	805	656	3,117	
09/04/03 to 10/22/03	Cell 13	3,580	298	1,129	5,007	
01/08/04 to 03/24/04	Cell 14&15	4,462	288	257	5,007	
05/25/04 to 07/28/04	Cell 16&17	4,409	822	3,191	8,422	
07/30/04 to 09/17/04	Cell 18&19	3,741	65	685	4,491	
09/28/04 to 10/25/04	Cell 20	751	591	393	1,735	
09/28/04 to 10/25/04	Cell 21	525	569	0	1,094	
09/28/04 to 10/25/04	Cell 22	1,161	686	0	1,847	
	Total	37,787	8,619	7,146	53,552	

Note:

All quantities determined by pre- and post- excavation surveying.

Table 3 - Quantity of Material Transferred to OPCAs During the Month of October October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are reported in cubic yards)

		Approximate Quantity T	ransported to OPCAs
Date	# of truckloads	Hill 78 (non-TSCA)	Bldg. 71 (TSCA)
Bank Soil and Sedin	nent	-	
10/1/2004	32	352	0
10/11/2004	40	0	440
10/12/2004	51	0	561
10/13/2004	49	0	539
10/14/2004	38	0	418
Monthly totals	210	352	1,958

Note:

All quantities are in compacted or "in-place" cubic yards.

(1) Estimated at 11 cy per truck

Table 4 - Quantity of Material Transferred to OPCAs to Date October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are reported in cubic yards)

		Approximate Quant	
Date	Location	Hill 78 (non-TSCA)	Bldg. 71 (TSCA)
Site Preparation Activ	ities		
09/11/02	Building 65 Stockpile Management Area	225	
Bank Soil and Sedime	nt		
12/05/02 to 12/19/02	Stockpile Management Area/Excavation Cells	4,718 (1)	910 (1)
02/11/03 to 02/28/03	Stockpile Management Area/Excavation Cells	5,137 (2)	539 (2)
03/03/03 to 03/14/03	Stockpile Management Area/Excavation Cells	1,749 (2)	1,353 (2)
04/07/03 to 04/18/03	Stockpile Management Area/Excavation Cells	2,710 (3)	1,698 (3)
04/07/03 to 04/18/03	Stockpile Management Area/Cleanup Material	370 (3)	40 (3)
05/12/03 to 05/14/03	Stockpile Management Area/Excavation Cells	1,826 (3)	0
05/12/03 to 05/14/03	Stockpile Management Area/Cleanup Material	220 (3)	0
06/11/03 to 06/12/03	Stockpile Management Area/Excavation Cells	0	704 (3)
06/16/03 to 06/17/03	Stockpile Management Area/Excavation Cells	712 (3)	0
06/16/03 to 06/17/03	Stockpile Management Area/Cleanup Material	146 (3)	0
07/07/03 to 07/11/03	Stockpile Management Area/Excavation Cells	1,188 (3)	748 (3)
09/15/03 to 09/30/03	Stockpile Management Area/Excavation Cells	2,090 (3)	308 (3)
10/28/03 to 10/30/03	Stockpile Management Area/Excavation Cells	1,623 (3)	33 (3)
10/28/03 to 10/30/03	Stockpile Management Area/Cleanup Material	181 (3)	0
11/18/03	Demolition Debris from Parcels I8-10-2 and I8-10-3	200 (4)	0
1/12/04	Stockpile Management Area/Excavation Cells	77 (3)	0
04/28/04 to 4/30/04	Stockpile Management Area	0	825 (3)
	Stockpile Management Area/Excavation Cells/Outfall		
05/12/04 to 05/27/04	Repair on Parcel I8-23-6	1,518 (3)	484 (3)
06/03/04 to 06/22/04	Stockpile Management Area	0	528 (3)
07/06/04 to 07/16/05	Stockpile Management Area	396 (3)	836 (3)
08/11/04 to 08/31/04	Stockpile Management Area	1,045 (3)	0
09/28/04 to 09/30/04	Stockpile Management Area	1,375 (3)	0
10/01/04 to 10/14/04	Stockpile Management Area	352 (3)	1,958 (3)
	F	07.050	40.004
	Project Totals	27,858	10,964

Pursuant to the Consent Decree, EPA is allowed to dispose of up to 50,000cy of material into GE OPCAs. Pursuant to August 2004 agreement between EPA and GE, EPA is allowed to dispose an additional 750cy of material into the GE OPCAs to account for a portion of the volume of material generated as part of the removal of the gabion baskets and reno mattresses along Deming Street. Notes:

All quantities are in compacted or "in-place" cubic yards.

- (1) Estimated at 14cy per truck, loaded with excavator.
- (2) Estimated at 11cy per truck due to loading out frozen material.
- (3) Estimated at 11cy per truck, loaded with front end loader.
- (4) Estimated at 8cy per truck

Table 5 - Quantity of non-TSCA Material Transported to Waste Management of New Hampshire-TREE, Rochester, N.H.

During the Month of October October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are reported in tons)

Date Shipped	Doc. Number	Stockpile Area	Net Weight (Tons) (1)
10/15/04	0622WMNH	Cell 20,21,22 Area 64D	31.48
10/15/04	0623WMNH	Cell 20,21,22 Area 64D	30.49
10/15/04	0624WMNH	Cell 20,21,22 Area 64D	29.96
10/15/04	0625WMNH	Cell 20,21,22 Area 64D	33.04
10/15/04	0626WMNH	Cell 20,21,22 Area 64D	33.74
10/15/04	0627WMNH	Cell 20,21,22 Area 64D	30.82
10/15/04	0628WMNH	Cell 20,21,22 Area 64D	34.01
10/15/04	0629WMNH	Cell 20,21,22 Area 64D	33.55
10/15/04	0630WMNH	Cell 20,21,22 Area 64D	30.54
10/15/04	0631WMNH	Cell 20,21,22 Area 64D	33.09
10/18/04	0632WMNH	Cell 20,21,22 Area 64D	29.12
10/18/04	0633WMNH	Cell 20,21,22 Area 64D	30.03
10/18/04	0634WMNH	Cell 20,21,22 Area 64D	32.94
10/18/04	0635WMNH	Cell 20,21,22 Area 64D	31.13
10/18/04	0636WMNH	Cell 20,21,22 Area 64D	34.32
10/18/04	0637WMNH	Cell 20,21,22 Area 64D	31.72
10/18/04	0638WMNH	Cell 20,21,22 Area 64D	33.24
10/18/04	0639WMNH	Cell 20,21,22 Area 64D	32.19
10/18/04	0640WMNH	64D/ Building 65	30.72
10/19/04	0641WMNH	Cell 18W&19W Building 65	34.07
10/19/04	0642WMNH	Cell 18W&19W Building 65	31.41
10/19/04	0643WMNH	Cell 18W&19W Building 65	32.51
10/19/04	0644WMNH	Cell 18W&19W Building 65	29.68
10/19/04	0645WMNH	Cell 18W&19W Building 65	30.45
10/19/04	0646WMNH	Cell 18W&19W Building 65	31.83
10/19/04	0647WMNH	Cell 18W&19W Building 65	30.27
10/20/04	0648WMNH	Cell 18W&19W Building 65	32.99
10/20/04	0649WMNH	Cell 18W&19W Building 65	33.60
10/20/04	0650WMNH	Cell 18W&19W Building 65	33.66
10/20/04	0651WMNH	Cell 18W&19W Building 65	30.25
10/20/04	0652WMNH	Cell 18W&19W Building 65	28.78
10/20/04	0653WMNH	Cell 18W&19W Building 65	34.03
10/20/04	0654WMNH	Cell 18W&19W Building 65	33.75
10/20/04	0655WMNH	Cell 18W&19W Building 65	32.52
10/20/04	0656WMNH	Cell 18W&19W Building 65	32.53

Date Shipped	Doc. Number	Stockpile Area	Net Weight (Tons) (1)
10/20/04	0657WMNH	Cell 18W&19W Building 65	29.64
10/26/04	0658WMNH	Cell 20,21&22 Area 64C north	32.03
10/26/04	0659WMNH	Cell 20,21&22 Area 64C north	32.84
10/26/04	0660WMNH	Cell 20,21&22 Area 64C north	33.60
10/26/04	0661WMNH	Cell 20,21&22 Area 64C north	30.21
10/26/04	0662WMNH	Cell 20,21&22 Area 64C north	32.41
10/26/04	0663WMNH	Cell 20,21&22 Area 64C north	32.48
10/26/04	0664WMNH	Cell 20,21&22 Area 64C north	33.02
10/26/04	0665WMNH	Cell 20,21&22 Area 64C north	33.23
10/26/04	0666WMNH	Cell 20,21&22 Area 64C north	35.07
10/26/04	0667WMNH	Cell 20,21&22 Area 64C north	32.81
10/26/04	0668WMNH	Cell 20,21&22 Area 64C north	36.19
10/26/04	0669WMNH	Cell 20,21&22 Area 64C north	31.36
10/26/04	0670WMNH	Cell 20,21&22 Area 64C north	32.84
10/26/04	0671WMNH	Cell 20,21&22 Area 64C north	33.07
10/27/04	0672WMNH	Cell 20,21&22 Area 64C north	31.72
10/27/04	0673WMNH	Cell 20,21&22 Area 64C north	30.56
10/27/04	0674WMNH	Cell 20,21&22 Area 64C north	31.75
10/27/04	0675WMNH	Cell 20,21&22 Area 64C north	32.48
10/27/04	0676WMNH	Cell 20,21&22 Area 64C north	32.19
10/27/04	0677WMNH	Cell 20,21&22 Area 64C north	31.77
10/27/04	0678WMNH	Cell 20,21&22 Area 64C north	33.48
10/27/04	0679WMNH	Cell 20,21&22 Area 64C north	31.84
10/27/04	0680WMNH	Cell 20,21&22 Area 64C north	30.01
10/27/04	0681WMNH	Cell 20,21&22 Area 64C north	29.70
10/27/04	0682WMNH	Cell 20,21&22 Area 64C north	32.56
10/27/04	0683WMNH	Cell 20,21&22 Area 64C north	33.81
10/27/04	0684WMNH	Cell 20,21&22 Area 64C north	33.62
10/27/04 10/28/04	0685WMNH 0686WMNH	Cell 20,21&22 Area 64C north Cell 20,21&22 Area 64C north	32.03 31.18
		Cell 20,21&22 Area 64C north	+
10/28/04 10/28/04	0687WMNH 0688WMNH	Cell 20,21&22 Area 64C north	29.15 30.81
10/28/04	0689WMNH	Cell 20,21&22 Area 64C north	32.01
10/28/04	0690WMNH	Cell 20,21&22 Area 64C north	31.70
10/28/04	0691WMNH	Cell 20,21,22 Area 64D	33.86
10/28/04	0692WMNH	Cell 20,21,22 Area 64D	29.59
10/28/04	0693WMNH	Cell 20,21,22 Area 64D	32.49
10/28/04	0694WMNH	Cell 20,21,22 Area 64D	29.08
10/28/04	0695WMNH	Cell 20,21,22 Area 64D	32.03
10/28/04	0696WMNH	Cell 20,21,22 Area 64D	31.56
10/28/04	0697WMNH	Cell 20,21,22 Area 64D	29.82
10/28/04	0698WMNH	Cell 20,21,22 Area 64D	32.82
10/28/04	0699WMNH	Cell 20,21,22 Area 64D	33.11
10/28/04	0700WMNH	Cell 20,21,22 Area 64D	33.25
10/28/04	0701WMNH	Cell 20,21,22 Area 64D	34.82

Date Shipped	Doc. Number	Stockpile Area	Net Weight (Tons) (1)
10/29/04	0702WMNH	Cell 20,21,22 Building 65	30.13
10/29/04	0703WMNH	Cell 20,21,22 Building 65	29.26
10/29/04	0704WMNH	Cell 20,21,22 Building 65	30.84
10/29/04	0705WMNH	Cell 20,21,22 Building 65	30.95
10/29/04	0706WMNH	Cell 20,21,22 Building 65	29.89
10/29/04	0707WMNH	Cell 20,21,22 Building 65	31.25
10/29/04	0708WMNH	Cell 20,21,22 Building 65	31.76
10/29/04	0709WMNH	Cell 20,21,22 Building 65	33.00
10/29/04	0710WMNH	Cell 20,21,22 Building 65	32.86
10/29/04	0711WMNH	Cell 20,21,22 Building 65	34.27
	Total of Material Di	sposed	2,878.27

Notes:

(1) Net weights established at the disposal facility

Table 6 - Quantity of Water Treatment System Modutank Material Transported to CWM Chemical Services, Model City, N.Y. During the Month of October October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are reported in tons)

Date Shipped	Manifest Doc. Number	Manifest	Net Weight (Tons) (1)
10/04/04	00035	NYG0646686	30.06
		Total of Material Disposed	30.06

Notes:

(1) Net weights established at the disposal facility

Table 7- NPDES Sampling Results for Water Treatment System October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in part per billion, ppb)

Sample ID	Location	Date Collected	Aroclor 1016, 1221, 1232, & 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs	Total PCBs Filtered
H2-WW000001-0-4S30	Influent	30-Sep-04	ND(0.14)	ND(0.14)	1.1	0.93	2.0	0.046
H2-WW000004-0-4S30	Modutank Effluent	30-Sep-04	ND(0.014)	ND(0.014)	0.098	0.099	0.20	ND(0.013)
H2-WW000005-0-4S30	Sand Filter Effluent	30-Sep-04	ND(0.014)	ND(0.014)	0.060	0.047	0.11	0.014
H2-WW000002-0-4S30	Intermediate	30-Sep-04	ND(0.013)	ND(0.013)	0.018	0.027	0.045	NS
H2-WW000003-0-4S30	Effluent	30-Sep-04	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.013)	NS
H2-WW000001-0-4C21	Influent	21-Oct-04	NR	NR	NR	NR	NR	NR
H2-WW000004-0-4C21	Modutank Effluent	21-Oct-04	NR	NR	NR	NR	NR	NR
H2-WW000005-0-4C21	Sand Filter Effluent	21-Oct-04	NR	NR	NR	NR	NR	NR
H2-WW000002-0-4C21	Intermediate	21-Oct-04	NR	NR	NR	NR	NR	NS
H2-WW000003-0-4C21	Effluent	21-Oct-04	NR	NR	NR	NR	NR	NS
Action Level	Effluent		0.50	0.50	0.50	0.50	0.50	N/A

Notes:

ND(0.013) - Analyte was not detected. The value in parentheses is the associated detection limit.

Modutank Effluent- Sample collected between the modutank and the oil/water separator.

Sand Filter Effluent - Sample collected between the sand and carbon filter.

Intermediate - Sample collected between carbon units which are being operated in series.

NS - Not Sampled

N/A - Not Available

NR - Not yet reported

Table 7a - NPDES non-PCB Sampling Results for Water Treatment System October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in part per billion, ppb)

Sample ID	H2-WW000001-0-4S30	H2-WW000004-0-4S30	H2-WW000005-0-4S30	H2-WW000002-0-4S30	H2-WW000003-0-4S30	NPDES Permit
Sample type	Influent	Modutank Effluent	Sand Filter Effluent	Intermediate	Effluent	Regulatory
Date Collected	09/30/2004	09/30/2004	09/30/2004	09/30/2004	09/30/2004	Effluent Limits
Analyte						
APP IX SEMIVOLATILES						
BENZO(A)ANTHRACENE	0.66 J	ND	ND	ND	ND	100
BENZO(A)PYRENE	0.62 J	ND	ND	ND	ND	100
BENZO(B)FLUORANTHENE	0.69 J	ND	ND	ND	ND	100
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND	ND	1.5 J	100
CHRYSENE	0.75 J	ND	ND	ND	ND	100
FLUORANTHENE	4.3 J	ND	ND	ND	ND	100
PYRENE	3.9 J	ND	ND	ND	ND	100
APP IX VOLATILES						
ACETONE	2.6 J	2.0 J	ND	2.2 J	ND	100
CARBON TETRACHLORIDE	ND	ND	ND	0.25 J	ND	N/A
CHLOROFORM	ND	ND	ND	0.68 J	ND	100
CIS-1,2-DICHLOROETHENE	ND	ND	ND	0.31 J	ND	N/A
M,P-XYLENE (SUM OF ISOMERS)	ND	ND	0.25 J	ND	ND	*
TERT-BUTYL METHYL ETHER	0.29 J	ND	0.27 J	5.7	6.8	70
XYLENES (TOTAL)	ND	ND	0.26 J	ND	ND	*
METALS			•	•		
BARIUM	27.5	15.9	11.9	NS	25.4	100
CHROMIUM	5.0	1.5	ND	NS	ND	100
COPPER	10.0	5.0	17.0	NS	ND	100
LEAD	11.2	1.3	1.3	NS	ND	50
NICKEL	4.5	ND	ND	NS	ND	100
ZINC	19.8	7.0	16.1	NS	6.7	500

Notes:

Modutank Effluent- Sample collected between the modutank and the oil/water separator.

Sand Filter Effluent - Sample collected between the sand and carbon filter.

Intermediate - Sample collected between carbon units which are being operated in series.

Only detected constituents are summarized

ND - not detected

J - Indicates an estimated value

* Total BTEX (Benzene, Toluene, Ethyl Benzene and Xylene) can not exceed 100 ppb

N/A - not available

NS -Not sampled

Table 8 - Daily Air Monitoring Results October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

		Average Site	
		Concentration	Average Period
Date Collected	Sample Location	(mg/m³)	(Hours:Min)
	Upwind		
	Downwind		
10/1/2004	Background		
	Upwind		
	Downwind		
10/2/2004	Background		
	Upwind	0.110	6
	Downwind	0.011	6
10/4/2004	Background	0.002	6
	Upwind	0.000	6
	Downwind	0.000	9
10/5/2004	Background	0.000	9
	Upwind	0.006	8
	Downwind	0.000	8
10/6/2004	Background		
	Upwind	0.014	8
	Downwind	0.001	8
10/7/2004	Background	0.009	8
	Upwind	0.006	8
	Downwind	0.019	8
10/8/2004	Background	0.018	8
	Upwind	0.013	7
	Downwind	0.032	7
10/9/2004	Background	0.017	6
	Upwind	0.008	7
	Downwind	0.001	6
10/11/2004	Background	0.000	6
	Upwind		
	Downwind		
10/12/2004	Background		
	Upwind	0.009	8
	Downwind	0.002	7
10/13/2004	Background	0.001	7
	Upwind	0.000	4
	Downwind	0.005	8
10/14/2004	Background	0.018	7
	Upwind	N/A	N/A
	Downwind	N/A	N/A
10/15/2004	Background	N/A	N/A

		Average Site Concentration	Average Period
Date Collected	Sample Location	(mg/m³)	(Hours:Min)
	Upwind	##	##
	Downwind	##	##
10/16/2004	Background	##	##
	Upwind	0.006	8
	Downwind	0.004	8
10/18/2004	Background	0.000	4
	Upwind	N/A	N/A
	Downwind	N/A	N/A
10/19/2004	Background	N/A	N/A
	Upwind	0.001	9
	Downwind	0.003	9
10/20/2004	Background	0.000	8
	Upwind	N/A	N/A
	Downwind	N/A	N/A
10/21/2004	Background	N/A	N/A
	Upwind	0.004	9
	Downwind	0.009	9
10/22/2004	Background	0.001	9
	Upwind	##	##
	Downwind	##	##
10/23/2004	Background	##	##
	Upwind	**	**
	Downwind	**	**
10/25/2004	Background	**	**
	Upwind	0.021	9
	Downwind	0.013	9
10/26/2004	Background		
	Upwind	0.025	8
	Downwind	0.016	8
10/27/2004	Background	0.018	7
	Upwind	0.008	5
	Downwind	0.002	5
10/28/2004	Background	0.000	5
	Upwind	0.013	7
	Downwind	0.021	7
10/29/2004	Background	0.011	7
	Upwind	##	##
	Downwind	##	##
10/30/2004	Background	##	##

Notes:

N/A - Not available due to precipitation forecast > 50%

- Saturday work being performed with minimal dust potential, no monitoring performed.

^{--- -} No reading due to technical difficulties with monitoring equipment

^{** -} No data colledcted due to down load of backlogged data. Work being performed was backfill with clean material

Table 9 - Daily Water Column Turbidity Monitoring Results October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

	Flow at		Turk	idity (n	tu)	_
Date	Coltsville (cfs)	Location	Average	High	Low	Temperature Average (°C)
		Downstream of Lyman Street Bridge	8.8	83.2	2.0	14.1
10/1/2004	186	Downstream of Pomeroy Avenue Bridge	234.9	638.9	47.7	14.14
		Downstream of Lyman Street Bridge	3.2	3.7	2.5	14.0
10/2/2004	145	Downstream of Pomeroy Avenue Bridge	270.5	941.3	31.7	14.30
		Downstream of Lyman Street Bridge	4.8	5.5	3.8	13.4
10/3/2004	150	Downstream of Pomeroy Avenue Bridge	2.1	3.8	1.2	13.7
		Downstream of Lyman Street Bridge	4.8	7.2	3.2	12.7
10/4/2004	124	Downstream of Pomeroy Avenue Bridge	0.4	1.3	0.0	12.9
		Downstream of Lyman Street Bridge	9.1	56.7	2.4	12.55
10/5/2004	111	Downstream of Pomeroy Avenue Bridge	0.4	1.5	-0.2	12.6
		Downstream of Lyman Street Bridge	77.5	811.0	3.7	10.88
10/6/2004	105	Downstream of Pomeroy Avenue Bridge	4.6	50.1	0.0	10.9
		Downstream of Lyman Street Bridge	8.7	57.1	2.6	11.55
10/7/2004	101	Downstream of Pomeroy Avenue Bridge	2.4	3.8	1.5	11.4
		Downstream of Lyman Street Bridge	2.7	4.3	2.1	12.81
10/8/2004	97	Downstream of Pomeroy Avenue Bridge	2.4	3.9	1.7	12.6
		Downstream of Lyman Street Bridge	3.8	7.0	2.3	13.48
10/9/2004	96	Downstream of Pomeroy Avenue Bridge	2.1	2.5	1.7	13.4
		Downstream of Lyman Street Bridge	4.2	6.1	3.6	13.14
10/10/2004	62	Downstream of Pomeroy Avenue Bridge	4.3	5.7	3.3	13.3
		Downstream of Lyman Street Bridge	7.3	26.2	4.2	11.55
10/11/2004	87	Downstream of Pomeroy Avenue Bridge	8.4	9.5	7.3	11.7
		Downstream of Lyman Street Bridge	6.7	10.0	5.1	10.67
10/12/2004	87	Downstream of Pomeroy Avenue Bridge	14.5	17.0	7.3	11.0
		Downstream of Lyman Street Bridge	6.7	10.0	5.1	10.67
10/13/2004	45	Downstream of Pomeroy Avenue Bridge	8.5	20.0	2.8	10.9
		Downstream of Lyman Street Bridge	10.9	13.8	7.5	11.32
10/14/2004	42	Downstream of Pomeroy Avenue Bridge	8.6	19.4	2.3	11.29
		Downstream of Lyman Street Bridge	138.7	1056.5	3.5	12.32
10/15/2004	52	Downstream of Pomeroy Avenue Bridge	5.5	7.2	3.9	12.28
		Downstream of Lyman Street Bridge	11.7	30.1	7.5	12.09
10/16/2004	109	Downstream of Pomeroy Avenue Bridge	13.6	19.4	5.4	12.31
		Downstream of Lyman Street Bridge	6.1	8.4	4.5	10.89
10/17/2004	96	Downstream of Pomeroy Avenue Bridge	23.1	36.3	2.3	11.09
,		Downstream of Lyman Street Bridge	393.6	998.6	0.3	9.86
10/18/2004	72	Downstream of Pomeroy Avenue Bridge	9.4	13.7	5.1	9.99
		Downstream of Lyman Street Bridge	525.8	1036.3	54.8	9.31
10/19/2004	124	Downstream of Pomeroy Avenue Bridge	258.5	1070.8		9.53
3, 13, 2001		Downstream of Lyman Street Bridge	133.2	1032.7	-0.8	8.52
10/20/2004	191	Downstream of Pomeroy Avenue Bridge	297.8	1473.5		8.58

	Flow at		Turb	oidity (n	tu)	
Date	Coltsville (cfs)	Location	Average	High	Low	Temperature Average (°C)
		Downstream of Lyman Street Bridge	4.5	15.2	-0.8	8.70
10/21/2004	138	Downstream of Pomeroy Avenue Bridge	536.6	1481.5	20.8	9.03
		Downstream of Lyman Street Bridge	401.6	1032.9	5.0	8.7
10/22/2004	99	Downstream of Pomeroy Avenue Bridge	265.1	749.5	38.5	8.94
		Downstream of Lyman Street Bridge	402.4	1027.3	6.7	8.5
10/23/2004	87	Downstream of Pomeroy Avenue Bridge	502.8	1472.3	52.7	8.51
		Downstream of Lyman Street Bridge	247.6	1025.7	-0.8	8.0
10/24/2004	85	Downstream of Pomeroy Avenue Bridge	488.8	1425.9	36.2	8.1
		Downstream of Lyman Street Bridge	243.4	1028.5	-0.8	8.43
10/25/2004	82	Downstream of Pomeroy Avenue Bridge	294.0	1056.3	3.8	8.4
		Downstream of Lyman Street Bridge	113.1	1027.8	-0.6	8.04
10/26/2004	88	Downstream of Pomeroy Avenue Bridge	12.7	78.0	2.0	8.0
		Downstream of Lyman Street Bridge	N/A	N/A	N/A	N/A
10/27/2004	78	Downstream of Pomeroy Avenue Bridge	N/A	N/A	N/A	N/A
		Downstream of Lyman Street Bridge	N/A	N/A	N/A	N/A
10/28/2004	82	Downstream of Pomeroy Avenue Bridge	N/A	N/A	N/A	N/A
		Downstream of Lyman Street Bridge	2.8	4.2	2.0	9.02
10/29/2004	66	Downstream of Pomeroy Avenue Bridge	10.8	26.1	1.9	9.21
		Downstream of Lyman Street Bridge	3.6	4.5	2.7	8.87
10/30/2004	66	Downstream of Pomeroy Avenue Bridge	2.8	3.6	1.8	8.76
		Downstream of Lyman Street Bridge	4.2	22.4	1.5	10.54
10/31/2004	72	Downstream of Pomeroy Avenue Bridge	1.5	2.0	0.8	10.41

Notes:

Turbidity Action Level - Average Downstream (Pomeroy Avenue)≥ Average Downstream (Lyman Street) + 50 ntu

cfs - Cubic feet per second

ntu - nephelometric turbidity units

Measurements collected using YSI 6200 Data Acquisition System using 600 OMS sonde with a 6136 Turbidity Probe

Flow data was obtained from the USGS Station 01197000 in Coltsville, MA at approximately midday.

Negative values are attributed to +/- 2ntu accuracy of the turbidity probe.

Exceedence on 10/1 and 10/2 are attributed to repairs being performed on the downstream dam with clean materials.

Exceedences between 10/19 and 10/26 can be attributed to the probes being silted in during the rainstorm on 10/19. The probes were pulled on 10/27, recalibrated and returned to service on 10/29.

11/16/2004

Table 10 - Summary of Turbidity, PCB, and TSS Water Column Monitoring Results October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

			Tu	rbidity	(ntu)		Calculated					
Location	Date	Estimated Flow (cfs)	High	Low	Daily Average	Water Temp. (°C)	Flow Beginning (cfs)	Calculated Flow End (cfs)	Sample ID	Total PCB Concentration (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
Upstream of Newell St. Bridge	10/06/04	105	NS	NS	NS	NS	NS	NS	H0-SW000054-0-4C06		NS	NS
Downstream of Lyman St. Bridge	10/06/04	105	811.0	3.7	77.5	10.88	NS	NS	H2-SW000055-0-4C06	ND(0.013)	ND(0.013)	2.2
Downstream of Pomeroy Ave. Bridge	10/06/04	105	50.1	0.0	4.6	10.90	131.2	127.0	H2-SW000052-0-4C06	ND(0.013)	ND(0.013)	2.8
Downstream of Pomeroy Ave. Bridge (duplicate)	10/06/04	105	50.1	0.0	4.6	10.90	131.2	127.0	H2-SW000052-1-4C06	NS	ND(0.013)	NS
Upstream of Newell St. Bridge	10/19/04	124	NS	NS	NS	NS	NS	NS	H0-SW000054-0-4C19	0.027	ND(0.013)	9.4
Downstream of Lyman St. Bridge	10/19/04	124	1036.3	54.8	525.8	9.31	NS	NS	H2-SW000055-0-4C19	0.11	ND(0.013)	9.0
Downstream of Pomeroy Ave. Bridge	10/19/04	124	258.5	13.8	258.8	9.53	126.0	162.6	H2-SW000052-0-4C19	0.076	ND(0.013)	8.3

Notes:

PCB Action Level - Downstream (Pomeroy Avenue) ≥ Downstream (Lyman Street) + 5 ug/L

ND(0.013) - Analyte was not detected. The value in parentheses is the associated detection limit.

cfs - Cubic feet per second

ntu - nephelometric turbidity units

NS - Not Sampled

Temperature measured YSI 600 oms system.

Flow data was obtained from the USGS Station 01197000 in Coltsville, MA at approximately midday.

Water column samples were collected as 4 grab composite samples.

Two flow values calculated, one at the beginning of the sampling event and one at the end of sampling event.

Samples on 10/19/04 were collected during a rainstorm, turbidity meters were silted in during this storm causing data anomolies.

Table 11 - PCB Air Sampling Results October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in µg/m³)

Sample ID	Location (1)	Date Collected	Aroclor 1016, & 1242	Aroclor 1221, 1232, & 1248		Aroclor 1260	Total PCBs
H2-AR000007-0-4C06	background	06-Oct-04	ND(0.00270)	ND(0.00270)	ND(0.00270)	ND(0.00270)	ND(0.00270)
H2-AR000036-0-4C06	AR000036	06-Oct-04	ND(0.00293)	ND(0.00293)	ND(0.00293)	ND(0.00293)	ND(0.00293)
H2-AR000036-1-4C06 (duplicate)	AR000036	06-Oct-04	ND(0.00279)	ND(0.00279)	ND(0.00279)	ND(0.00279)	ND(0.00279)
H2-AR000037-0-4C06	AR000037	06-Oct-04	ND(0.00275)	ND(0.00275)	ND(0.00275)	ND(0.00275)	ND(0.00275)
H2-AR000038-0-4C06	AR000038	06-Oct-04	ND(0.00265)	ND(0.00265)	ND(0.00265)	ND(0.00265)	ND(0.00265)
H2-AR000039-0-4C06	AR000039	06-Oct-04	ND(0.00277)	ND(0.00277)	ND(0.00277)	ND(0.00277)	ND(0.00277)

Notes:

Notification Level: 0.05μg/m³
Action Level: 0.1μg/m³
1- See Figure 1 for locations

Table 12 - Backfill Material Testing Results October 2004 Monthly Report

GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in part per million, ppm)

Sample ID	H2-OT000056-0-4C25-1	H2-OT000056-0-4C25-5	
Sample type	Common Fill	Common Fill	Regulatory
Date Collected	10/25/2004	10/25/2004	Limits (1)
Analyte			
APP IX SEMIVOLATILES			
ACETOPHENONE	.018 J	.022 J	1000
APP IX VOLATILES			
METHYLENE CHLORIDE	.0014 J	.0011 J	0.1
METALS			
ANTIMONY	1.1	0.75	10
ARSENIC	3.7	3.1	30
BARIUM	25.6	18.1	1000
BERYLLIUM	0.19	0.21	0.7
CADMIUM	0.52	0.42	30
CHROMIUM	4.7	5.1	1000
COBALT	6.1	6.4	500
COPPER	10.4	10.1	1000
LEAD	7.7	5.7	300
NICKEL	10.0	9.4	300
SILVER	ND	0.084	100
TIN	0.62	0.79	10
VANADIUM	6.0	6.6	400
ZINC	45.3	34.5	2500
PCBS		•	
PCB, TOTAL	ND	ND	0.1*
ORGANIC			_
PETROLEUM HYDROCARBON	34.3	21.7	200*

Notes:

Only detected constituents are summarized

- --- not sampled
- (1) Massachusetts contingency plan S-1 limits
- * Project specific acceptable levels for backfill

Table 13 - Post Excavation Soil/ Sediment Stockpile Characterization Analytical Results October 2004 Monthly Report GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in part per million, ppm)

Sample ID	H2-OT000192-0-4C14	H2-OT000193-0-4C14	H2-OT000194-0-4C14	H2-OT000195-0-4C14	H2-OT000195-1-4C14
					stockpile material
	stockpile material	stockpile material	stockpile material	stockpile material	characterization
Sample type	characterization	characterization	characterization	characterization	(duplicate)
Date Collected	10/14/2004	10/14/2004	10/14/2004	10/14/2004	10/14/2004
Stockpile Location	Area 64C	Area 64C	Building 65	Building 65	Building 65
Analyte					
PCBS					
PCB, TOTAL	32	5.5	9.3	8.1	13
AROCLOR-1254	6.8	1.4	1.8	1.7	2.6
AROCLOR-1260	25 J	4.1	7.5	6.4 J	9.9 J
INORGANICS					
PAINT FILTER LIQUIDS (ml)	ABSENT	ABSENT	ABSENT	ABSENT	
PERCENT SOLIDS (%)	89.2	90.7	86.5	89.2	86.3

Notes:

Only detected constituents are summarized

J - Indicates an estimated value

ND - not detected

--- not sampled

Sample ID	H2-OT000203-0-4C26	H2-OT000204-0-4C26	H2-OT000204-1-4C26	H2-OT000205-0-4C26	H2-OT000206-0-4C26
			stockpile material		
	stockpile material	stockpile material	characterization	stockpile material	stockpile material
Sample type	characterization	characterization	(duplicate)	characterization	characterization
Date Collected	10/26/2004	10/26/2004	10/26/2004	10/26/2004	10/26/2004
Stockpile Location	Building 65	Building 65	Building 65	Area 64B	Area 64B
Analyte					
PCBS					
PCB, TOTAL	23	16	18	4.5	21
AROCLOR-1254	6.2	2.3	3	1.4	3.5
AROCLOR-1260	17	14	15	3.1	17
INORGANICS					
PAINT FILTER LIQUIDS (ml)	ABSENT	ABSENT		ABSENT	ABSENT
PERCENT SOLIDS (%)	86.6	87.3	87.4	90.8	84.5

Notes:

Only detected constituents are summarized

J - Indicates an estimated value

ND - not detected

--- not sampled

Table 14 - Cells 20, 21 and 22, Post-Excavation Confirmation Samples Analytical Results October 2004 Monthly Report GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in part per million, ppm)

Sample ID	H2-OT000182-0-4C04	H2-OT000183-0-4C04	H2-OT000185-0-4C06	H2-OT000186-0-4C06
Sample type	Cell 20E sediment	Cell 21E sediment	Cell 22E sediment	Cell 22E sediment
Date Collected	10/04/2004	10/04/2004	10/06/2004	10/06/2004
Analyte				
PCBS				
AROCLOR-1016	ND	ND	ND	ND
AROCLOR-1221	ND	ND	ND	ND
AROCLOR-1232	ND	ND	ND	ND
AROCLOR-1242	ND	ND	ND	ND
AROCLOR-1248	ND	ND	ND	ND
AROCLOR-1254	0.04	ND	ND	ND
AROCLOR-1260	ND	ND	ND	ND
PCB, TOTAL	0.04	ND	ND	ND
INORGANICS	·			
PERCENT SOLIDS (%)	90.9	91.6	91.3	89.6

Notes:

Sample ID	H2-OT000196-0-4C21	H2-OT000197-0-4C21	H2-OT000198-0-4C21	H2-OT000199-0-4C21
Sample type	Cell 21W sediment	Cell 21W sediment	Cell 22W sediment	Cell 22W sediment
Date Collected	10/21/2004	10/21/2004	10/21/2004	10/21/2004
Analyte				
PCBS				
AROCLOR-1016	ND	ND	ND	ND
AROCLOR-1221	ND	ND	ND	ND
AROCLOR-1232	ND	ND	ND	ND
AROCLOR-1242	ND	ND	ND	ND
AROCLOR-1248	ND	ND	ND	ND
AROCLOR-1254	ND	ND	ND	ND
AROCLOR-1260	ND	ND	ND	ND
PCB, TOTAL	ND	ND	ND	ND
INORGANICS				
PERCENT SOLIDS (%)	89.0	89.4	89.4	90.7

Notes:

Table 15 - Sluiceway Sediment Characterization (Parcel I7-21-3) Sample Analytical Results October 2004 Monthly Report GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in part per million, ppm)

Sample ID	H2-OT000180-0-4S29	H2-OT000181-0-4S30	
-	Sediment characterization	Sediment characterization	MCP
Sample type	Sluiceway @ Parcel I7-21-3	Sluiceway @ Parcel I7-21-3	S-1 Limits
Date Collected	09/29/2004	09/30/2004	3-1 LITTIES
Analyte			
PCBS			
AROCLOR-1260	0.12	0.091	
PCB, TOTAL	0.12	0.091	2.0
APP IX SEMIVOLATILES			
BENZO(A)ANTHRACENE	.22 J	.034 J	0.7
BENZO(A)PYRENE	.37 J	.044 J	0.7
BENZO(B)FLUORANTHENE	.26 J	.037 J	0.7
BENZO(GHI)PERYLENE	.28 J	.076 J	1000
BENZO(K)FLUORANTHENE	.39 J	.06 J	7
CHRYSENE	.3 J	.045 J	7
FLUORANTHENE	.5 J	.087 J	1000
INDENO(1,2,3-C,D)PYRENE	.24 J	.041 J	0.7
PHENANTHRENE	.26 J	.044 J	100
PHENOL	ND	.055 J	60
PYRENE	.48 J	.087 J	700
METALS			
ARSENIC	3.1	3.0	30
BARIUM	17.9	17.1	1000
BERYLLIUM	0.22	0.22	0.7
CADMIUM	0.32	0.34	30
CHROMIUM	5.5	5.4	1000
COBALT	6.5	6.6	500
COPPER	11.4	10.8	1000
LEAD	8.1	8.3	300
NICKEL	12.2	12.0	300
TIN	NA	NA	10
VANADIUM	5.6	5.6	400
ZINC	39.4	37.8	2500
ORGANIC			
PETROLEUM HYDROCARBON	32.8	43.8	300
INORGANICS			
PERCENT SOLIDS (%)	75.2	76.4	

Notes:

Only detected constituents are summarized

Table 16 - In-situ Riverbank Characterization Sampling; Cells 23 and 24 Analytical Results October 2004 Monthly Report GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in part per million, ppm)

Sample ID	H2-OT000187-0-4C13	H2-OT000188-0-4C13	H2-OT000189-0-4C14	H2-OT000189-1-4C14	H2-OT000190-0-4C14	H2-OT000191-0-4C21
Cample 12	insitu characterization					
Sample type		sampling (1)	sampling	sampling	sampling	sampling
Date Collected		10/13/2004	10/14/2004	10/14/2004	10/14/2004	10/21/2004
Analyte	10/10/2001	10/10/2001	10/11/2001	10/11/2001	10/11/2001	10/21/2001
PCBS						
AROCLOR-1254	1.9	ND	ND	5.2	5.7	1.2
AROCLOR-1260	13	110	32	32	38	6.8 J
PCB, TOTAL	15	110	32	37	44	8
METALS						
ANTIMONY	1.2				1.2	
ARSENIC	5.0	-			5.3	
BARIUM	68.5				29.2	
BERYLLIUM	0.37				0.34	
CADMIUM	0.86				0.66	
CHROMIUM	14.5				14.5	
COBALT	7.5				8.4	
COPPER	60.9				30.1	-
LEAD	117				44.9	
MERCURY	0.13				0.11	-
NICKEL	14.8	1	-		14.6	
SILVER	0.22	1			0.13	-
TIN	6.7				74.1	
VANADIUM	14.3	-			11.7	
ZINC	176				133	
TCLP METALS						
LEAD, TCLP	.326					
INORGANICS						
PAINT FILTER LIQUIDS (ml)	ABSENT				ABSENT	ABSENT
PERCENT SOLIDS (%)	81.7	82.0	80.4	81.1	87.3	81.5

Notes:

Only detected constituents are summarized

J - Indicates as estimated value

ND - not detected

(1) - Composite sample area was sub divided into 3 areas and re-sampled for PCBs only. See sample Ids: H2-OT000200-0-4C25, H2-OT000201-0-4C25, H2-OT000202-0-4C25

Table 16a - Addititonal In-situ Riverbank Characterization Sampling; Cells 23 and 24 Analytical Results October 2004 Monthly Report GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action Pittsfield, MA

(Results are presented in part per million, ppm)

Field Sample ID	H2-OT000200-0-4C25	H2-OT000201-0-4C25	H2-OT000202-0-4C25
Sample type	insitu characterization sampling	insitu characterization sampling (1)	insitu characterization sampling
Date Collected	10/25/2004	10/25/2004	10/25/2004
Analyte			
PCBS			
AROCLOR-1254	4.6 J	ND	6.6
AROCLOR-1260	35	110	32
PCB, TOTAL	40	110	39
INORGANICS			
PERCENT SOLIDS (%)	87.0	81.3	81.4

Notes:

(1) Area represented by this sample is classified as TSCA material. Material to be transported to GE's Building 71 OPCA

Only detected constituents are summarized



Photograph 1– Cell 17E Tree Planting Activities



Photograph 2– Riverbank Excavation Activities



Photograph 3– Riverbank Excavation Activities in Cell 22W



Photograph 4-Cell 20W Excavated Riverbed ready for Power Washing



Photograph 5- Cell 20W Riverbed Power Washing



Photograph 6- Cell 20W Dam Foundation and Washed Bedrock

